ENVIRONMENTAL ASSESSMENT
and
FINDING OF NO SIGNIFICANT IMPACT

for the

CITY OF LAS CRUCES,
NEW MEXICO

SECTION 595 WATER RESOURCES DEVELOPMENT ACT
West Mesa Industrial Park Wastewater System Improvement

April 2008

US Army Corps of Engineers®
Albuquerque District

Finding of No Significant Impact
Section 595 Water Resources Development Act
Las Cruces West Mesa Industrial Park
Wastewater System Improvement
Las Cruces, New Mexico

The U.S. Army Corps of Engineers (Corps), Albuquerque District, in cooperation with and at the request of the City of Las Cruces, New Mexico, is planning a project to extend existing sanitary sewer line within the Las Cruces West Mesa Industrial Park (Industrial Park), Las Cruces, Doña Ana County, New Mexico. The construction work would be conducted under authority of Section 595 of the Water Resources Development Act of 1999 (Public Law 106-53; 33 U.S.C. 2201 *et seq*), as amended. The Act authorizes the Corps to provide assistance for design and construction for water-related environmental infrastructure and resource protection and development projects in central New Mexico. The City of Las Cruces is the local sponsor. The proposed construction period is nine months, and is expected to start in July 2008.

The extension would link facilities located on the south side of the Industrial Park with facilities on the north side. The potential effects of the proposed action would be a reduction in impacts to groundwater. Replacing the industrial park septic tank systems by connecting the two facilities with existing sanitary sewer infrastructure to an existing wastewater treatment plant would protect local groundwater quality. The no-action alternative would not reduce septic system impacts to groundwater at the Industrial Park.

The proposed work would not affect waters of the United States regulated by Section 404 of the Clean Water Act (CWA); therefore a Section 404 evaluation would not be needed for the project. The proposed construction of the sewage line extension would occur outside the floodplain and would not significantly alter any natural feature or use of the area. Therefore, the planned action is consistent with Executive Order 11988 (Floodplain Management). The proposed work complies with Executive Order 11990 (Protection of Wetlands) as no wetlands are within the project area.

One prehistoric or historic archaeological site was found during a cultural resources survey within the project area of direct effect. The site, a historic trash scatter, is located within 50 feet of the project area. Two isolated occurrences (a broken mano and a chert flake) were recorded within the project area. These artifacts are not likely to be impacted by the project. The nearby archaeological site can be avoided, and the two isolated occurrences have been documented and are not considered significant. The Corps has received no indication of tribal concerns that would impact this project. Based on this information, the Corps is of the opinion that there would be "No Historic Properties Affected" by the proposed undertaking or on the historic and cultural resources of the region. The State Historic Preservation Office signed a letter of concurrence on August 28, 2007.

Best Management Practices (BMPs) that would be employed during construction include the use of silt fences as part of the Fugitive Dust Control Permit, and the use of already paved or

graveled roads for access to the work area. The trenches will be examined daily, prior to starting work, for lizards to be removed prior to initiating work. A Storm Water Pollution Prevention Plan will be prepared by the contractor and implemented during construction. Disturbance to vegetation during construction would be mitigated by re-seeding and revegetation. All equipment would be cleaned when moving between areas to prevent transfer of noxious weeds.

Only short-term negligible adverse impacts to land use, aesthetics, soils, air, noise, vegetation, and wildlife, would occur during construction. No impacts would occur to land use (long-term), climate, soils (long-term), air (long-term), wetlands or other waters of the U.S., special status species, floodplains, socioeconomics, environmental justice or cultural resources. Minor beneficial impacts would occur to human health and safety. The proposed project would not result in any moderate or significant, short-term, long-term, or cumulative adverse effects.

The planned action has been fully coordinated with federal, state, tribal, and local agencies with jurisdiction over the biological, ecological, cultural, and hydrological resources of the project area. The City of Las Cruces will obtain the required New Mexico Department of Transportation permit for boring the pipeline under I-10 prior to initiating construction. Based upon these factors and others discussed in detail in the Environmental Assessment, the planned action would not have a significant effect on the human environment. Therefore, an Environment Impact Statement will not be prepared for the proposed sewage line extensions at the Las Cruces West Mesa Industrial Park.

23 APR 08
Date

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1.0 INTRODUCTION

1.1 Background and Location

The United States Army Corps of Engineers (Corps), Albuquerque District, in cooperation with and at the request of the City of Las Cruces, Doña Ana County, New Mexico is planning a project to construct a sewer line extension in Las Cruces, Doña Ana County, New Mexico (see Figure 1 for project location). This project would extend the existing sanitary sewer line from the south side under Interstate Highway 10 to the north side of the Las Cruces West Mesa Industrial Park (Industrial Park). The new sewer line extension would connect the International Airport and the National Guard Armory to the existing wastewater treatment plant on the south side of the industrial park. The proposed construction period would be approximately nine months beginning in summer 2008.

The rehabilitation work would be conducted under Section 595 of the Water Resources Act of 1999 (Public Law 106-53; 33 U.S.C. 2201 *et seq*.) as amended. The Act authorizes the Corps to provide assistance in the form of design and construction for water-related environmental infrastructure, resource protection, and development projects in New Mexico. Provisions under the Act require that the project be publicly owned to receive Federal assistance. As such, the non-Federal project sponsor is the City of Las Cruces, New Mexico. The Act further requires that a cooperative agreement be established between the Federal and non-Federal interests. The Federal share of project costs under each cooperative agreement is 75 percent of the total project costs.

1.2 Purpose and Need

The Industrial Park currently has an existing wastewater treatment plant south of Interstate Highway 10. The International Airport and the National Guard Armory north of Interstate Highway 10 rely on septic tank systems for processing wastewater generated by the facilities. Replacing the septic tank systems for the two facilities with sanitary sewer infrastructure connected to the existing wastewater treatment plant would protect groundwater quality.

1.3 Regulatory Compliance

This Environmental Assessment was prepared by the Corps in compliance with all applicable Federal Statutes, Regulations, and Executive Orders, including the following:

- Archaeological Resources Protection Act of 1979 (16 U.S.C 470)
- Clean Water Act of 1972 and Amendments of 1977(CWA)
- Clean Air Act of 1972, as amended (42 U.S.C. 7401 *et seq.*)
- Endangered Species Act of 1973, (ESA) as amended (16 U.S.C. 1531 *et seq*.)
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, 1994
- Farmland Protection Policy Act of 1981, as amended (7 U.S.C. 4201 *et seq.*)
- Federal Noxious Weed Act of 1974 (Public law 93-269; 7 U.S.C. 2801)

- Fish and Wildlife Coordination Act of 1958, as amended (16 U.S.C. 661 *et seq*.)
- Floodplain Management (Executive Order 11988)
- National Environmental Policy Act of 1969, as amended (42 U.S.C 4321 *et seq*.)
- Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500 *et seq*.)
- National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 *et seq*.)
- Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001 *et seq*.)
- Protection and Enhancement of the Cultural Environment (Executive Order 11593)
- Protection of Wetlands (Executive Order 11990)
- Procedures for Implementing NEPA (33 CFR 230; ER 200-2-2)
- U.S. Army Corps of Engineers' Procedures for Implementing NEPA (33 CFR 230)

This Environmental Assessment also reflects compliance with all applicable State of New Mexico and local regulations, statutes, policies, and standards of environmental stewardship of water and air quality, endangered plants and animals, and cultural resources.

2.0 PROPOSED ACTIONS AND ALTERNATIVES

All Federal agencies that assist or take part in projects that utilize funding are mandated by the National Environmental Policy Act (NEPA) to evaluate alternative courses of action. Typically, alternatives are a set of different locations that satisfy certain defined project criterion. However, alternatives can also include design considerations and/or attributes that may mitigate or reduce impacts generated by a given action. In general the NEPA process can provide decision makers with an evaluation of the present and future conditions with regard to the implementation and timing of an action at a given site. Finally, a particular design chosen from alternatives evaluated can then be implemented in the best interest of the public and environment.

2.1 Proposed Action

The proposed action would include a new sewer line extension that would connect the International Airport and the National Guard Armory to the existing wastewater treatment plant on the south side of the Industrial Park.

The system upgrade includes a lift station and extension of the existing sewer system with 8-inch diameter, polyvinyl chloride (PVC) pipe. The project would require open cut utility trenching for the majority of the sewer line placement, excavation for lift station construction, and trenchless construction methods for sewer line placement under Interstate 10 (I-10). One line would have multiple discharge points along the south side of the Airport, and extend southward along Crawford Road to an existing manhole on Crawford Road on the north side of I-10.

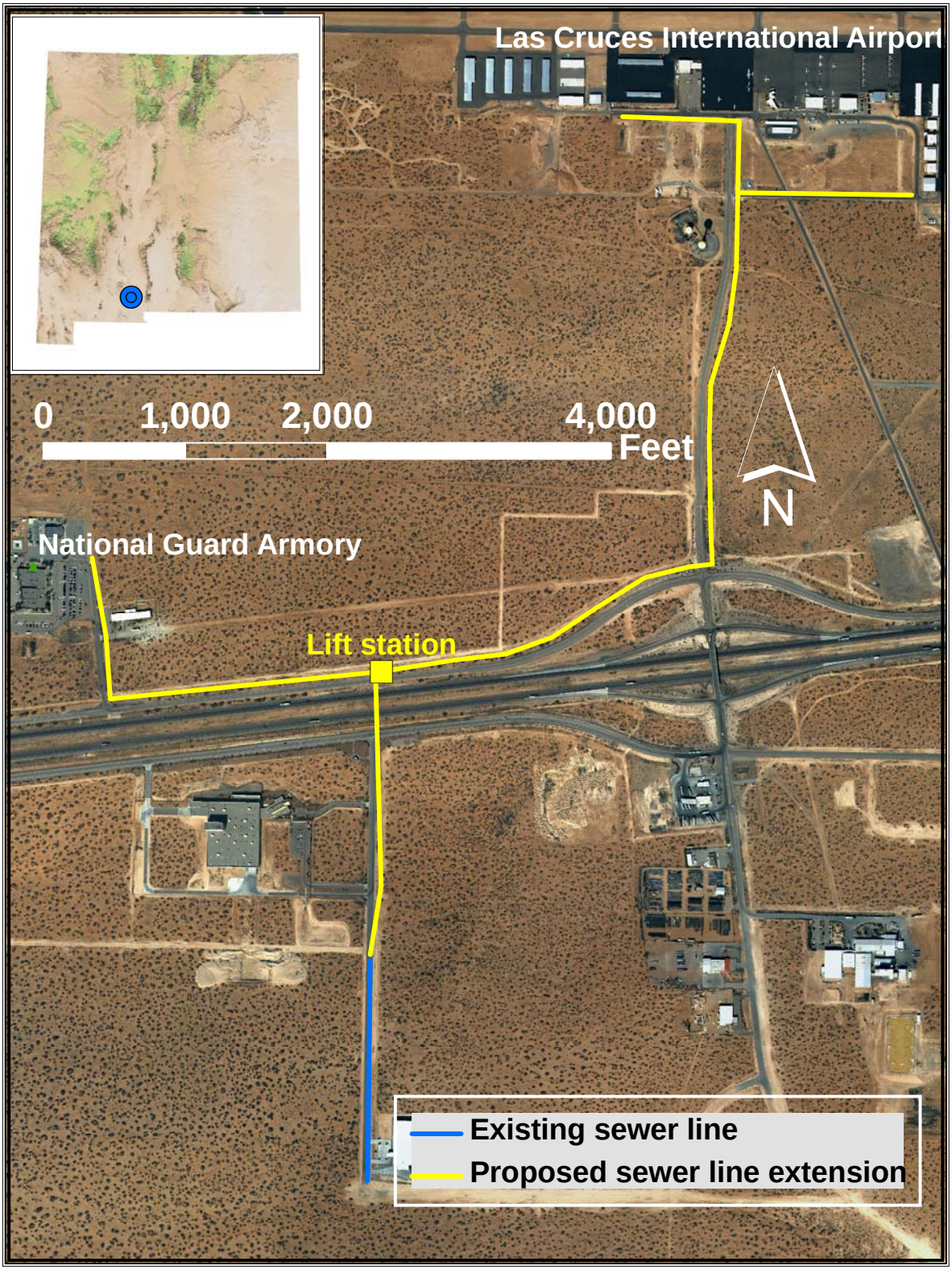

Figure 1. Overview of proposed sanitary sewer line extension from the Las Cruces International Airport and Guard Armory, Doña Ana County, New Mexico.

A second line would run south by the National Guard Armory, then east along the north frontage road to connect with the line from the airport. A concrete lift station with associated pumps and electrical controls would be constructed north of I-10, with a steel encased sewer line running under I-10. The final sewer lines would be jacked under the highway (I-10) and frontage roads, then run south along the road to connect to the existing industrial park system south of I-10.

The estimated construction cost for this proposed project is approximately $1,545,000. Federal costs would be approximately $1,170,000 and non-Federal costs would be approximately $375,000. The proposed construction period would be approximately nine months beginning in summer 2008.

2.2 The No-Action Alternative

Under the No-Action alternative, installation of the sewer line extension would not take place. No federal funding would be expended and there would be no new effects to the project site or surrounding environment. However, the No-Action alternative would not support the City of Las Cruces' efforts to protect groundwater quality.

3.0 EXISTING ENVIRONMENTAL AND FORESEEABLE EFFECTS

3.1 Physical Resources

3.1.1 Physiography, Geology, and Soils

The proposed project is in the Rio Grande Valley, a wide floodplain of fertile bottomland (USDA 2008). These fertile soils and shallow water tables support vegetation as well as a variety of resident and migratory wildlife. The Rio Grande Valley is a productive agricultural area that contributes to the quality of life and economies of the urban areas of Las Cruces, Albuquerque, and Socorro, New Mexico, as well as several other smaller communities.

The project site is located west of the city of Las Cruces and the Rio Grande, near the Las Cruces Airport. West of the project site are the Sleeping Lady and Rough and Ready Hills with the Robledo Mountains and Mt. Picacho north of the site. These hills and mountains are the likely sources of the several hundred feet of clay, silt, sand, gravel and cobble deposits that underlie the project area. In general, alluvial deposits closest to the hills and mountains are coarse-grained whereas deposits further away from the mountains are fine-grained. Due to the nature of erosion / deposition, however, fine- and coarse-grained materials are found interbedded in the project area

The Rio Grande follows a well-defined geologic feature called the Rio Grande graben. The Rio Grande graben contains several thousand feet of poorly consolidated sediment of the Santa Fe Group of the middle Miocene to Pleistocene age. The terrain in the area is characterized by gently sloping plains from the east to the Rio Grande ranging from about 3,720 feet to 4,300 feet in elevation. Groundwater was not intercepted during drilling activities where borings were advanced to 15 feet below ground surface. It is believed that groundwater is buried at this area to

depths exceeding 50 feet below ground surface (USACE 2006). The general soil conditions are deep, nearly level, well-drained soils that are formed in recent alluvium, on flood plains of the Rio Grande.

The proposed action area occurs within the Bluepoint soil association (USDA 2008). This association consists of loamy sand with three to 15 percent slopes and is somewhat excessively drained. This soil association is most commonly found within structural benches, dunes, alluvial fans and stream terraces. The ground would be temporarily disturbed by trenching during construction. The excavated material would be used to bury the pipelines during construction. A Fugitive Dust Control Permit would be required during construction to reduce erosion. Disturbed soil will be re-vegetated following construction. There would be no long-term effect to soils by the proposed project or by the no-action alternative.

3.1.2 Climate

The climate in the vicinity of the proposed project is classified as arid (USDA 2008). The temperature occasionally reaches 100 degrees F or falls to zero or below, but not in all years. The average annual precipitation ranges from eight to ten inches. Although an average of only one day a year has more than half-inch of precipitation, these infrequent, brief, heavy showers may bring one half to one inch of rain, except in the dry winter season. Occasionally, hail accompanies summer thunderstorms. The average annual snowfall is less than four inches and snowfall seldom exceeds one or two inches and generally melts in a few hours. The growing season is about six to seven months long. Relative humidity averages less than 50 percent and generally less than 20 percent on hot sunny afternoons. In winter the prevailing winds are northerly and in summer the prevailing winds are southerly. Wind speed averages nearly ten miles per hour for the year. There would be no effect to climate by the proposed project or by the no-action alternative.

3.1.3 Water Resources

Section 401 of the CWA, (CEA; 33 U.S.C. 1251 *et seq.*) as amended, requires that a Water Quality Certification Permit be obtained for anticipated discharges associated with construction activities or other disturbance within waterways. Section 401 of the CWA does not apply to this project, as there would be no discharge associated with construction activities or other disturbance within waters or wetlands of the United States.

Section 402 of the Clean Water Act (CWA; 33 U.S.C. 1251 *et seq.*) as amended, regulates point-source discharges of pollutants into waters of the United States and specifies that storm-water discharges associated with construction activities shall be conducted under the National Pollution Discharge Elimination System (NPDES) guidance. Construction activities associated with storm-water discharges are characterized by such things as clearing, grading, and excavation, subjecting the underlying soils to erosion by storm-water, which results in a disturbance to one or more acres of land. The NPDES general permit guidance would apply to this project because the project area is greater than one acre. Therefore, a Storm-Water Pollution Prevention Plan (SWPPP) is required and would be prepared by the contractor. Impacts from storm-water are expected to be negligible.

Section 404 of the CWA, (CWA; 33 U.S.C. 1251 *et seq*.) as amended, provides for the protection of waters of the United States through regulation of the discharge of dredged or fill material. The Corps' Regulatory Program (33 CFR Parts 320-330) requires that a Section 404 permit evaluation be conducted for all proposed construction that may affect waters of the United States. Section 404 of the CWA does not apply to this project, as there would be no discharge of dredged or fill material into waters of the United States.

3.1.4 Floodplains and Wetlands

Executive Order 11988 (Floodplain Management) provides Federal guidance for activities within floodplains of inland and coastal waters. The order requires Federal agencies to take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains. The proposed project area is not located within any special flood hazard areas inundated by the 100-year flood. They are located in an area that is either outside the 500-year floodplain or in an area in which flood hazards are undetermined (Flood Insurance Rate Map 1996). The proposed project area is located outside the 100-year floodplain. Therefore, the proposed project does not constitute any alterations or development within the historical floodplain and would have no new impacts to the historical or current floodplains. Executive Order 11990 (Protection of Wetlands) requires the avoidance, to the greatest extent possible, of both long and short-term impacts associated with the destruction, modification, or other disturbance of wetland habitats. There are no wetlands within the project area, and therefore, no impacts to wetlands would occur.

3.1.5 Air Quality, Noise and Aesthetics

Doña Ana County borders the El Paso, Texas and Ciudad Juarez, Mexico area as part of the Paso del Norte air shed. This region historically has air quality problems, including particulate matter and ozone pollution. The Las Cruces area in Doña Ana County is "in attainment" (does not exceed State and Federal Environmental Protection Agency air quality standards) for all criteria pollutants (NMED 2008). There are high levels of particulate matter. in Doña Ana County caused by natural events such as high wind speeds, ambient dry conditions, and man-made dust sources. The Doña Ana County Natural Events Action Plan (NEAP) includes agreements between stakeholders, the New Mexico Environment Department (NMED), with city and county dust ordinances, to minimize the public's exposure to PM_{10}.

The closest Class I areas are White Sands National Monument, 40 miles to the northeast, and the Gila Wilderness, approximately 88 miles to the northwest of the project area. Class I areas are special areas of natural wonder and scenic beauty, such as national parks, national monuments, and wilderness areas, where air quality should be given special protection. Class I areas are subject to maximum limits on air quality degradation.

All vehicles involved in construction would be required to have passed a current New Mexico emissions test and have required emission control equipment. The proposed project would result in a temporary but negligible increase in suspended dust particles from construction

activities. The project would maintain the work area within or outside the project boundaries free from particulates in accordance with Federal, State, and local air pollution standards. The proposed project would disturb more than three-quarters of an acre. Appropriate erosion and sediment controls would be implemented under a Fugitive Dust Control Permit. Water sprinklers and other methods would be used during construction to minimize dust. Air quality in Las Cruces, Doña Ana County, White Sands National Monument, and the Gila Wilderness would not be affected by the proposed project or by the no-action alternative.

Background noise levels in the proposed project areas are low. According to the Noise Center for the League for the Hard of Hearing (League for the Hard of Hearing, 2004), a typical, quiet residential area has a noise level of 40 decibels. A residential area near heavy traffic has a noise level of 85 decibels. Heavy machinery has a noise level of 120 decibels. During construction, noise would temporarily increase in the vicinity during vehicle and equipment operation. The Noise Center advises that noise levels above 85 decibels would harm hearing over time and noise levels above 140 decibels can cause damage to hearing after just one exposure. However, the increase in noise during construction would be minor and temporary, ending when construction is complete. Therefore, the proposed project would have no significant affect on noise.

3.2 Biological Resources

3.2.1 Vegetation Communities

The project site is near the boundary of the Chihuahuan Desertscrub and Desert Grassland vegetation communities (Brown and Lowe, 1977; Dick-Peddie 1993). The soils and vegetation within the project area have been moderately disturbed from the construction of the roads on the industrial park. The impacts to vegetation resulting from disturbance during construction would be mitigated by re-seeding and revegetation.

3.2.2 Noxious Weeds

The Federal Noxious Weed Act of 1974 (Public law 93-269; 7 U.S.C. 2801) provides for the control and eradication of noxious weeds and their regulation in interstate and foreign commerce. Executive Order 13112 directs Federal agencies to prevent the introduction of invasive (exotic) species and to control and minimize the economic, ecological, and human health impacts that invasive species cause. In addition, the State of New Mexico, under administration of the U.S. Department of Agriculture, designates and lists certain weed species as being noxious (Nellessen 2000). “Noxious” in this context means plants not native to New Mexico that may have a negative impact on the economy or environment and are targeted for management or control. Class C- listed weeds are common, widespread species that are fairly well established within the state. Management and suppression of Class C weeds is at the discretion of the lead agency. Class B weeds are considered common within certain regions of the state but are not widespread. Control objectives for Class B weeds are to prevent new infestations, and in areas where they are already abundant, to contain the infestation and prevent their further spread. Class A weeds have limited distributions within the state. Preventing new infestations and eliminating existing

infestations is the priority for Class A weeds. In order to prevent this, all equipment would be cleaned with a high-pressure water jet before leaving an area and entering a new area.

3.2.3 Wildlife

According to Brown (1982), the project areas occur within the biotic community of the Chihuahuan Desertscrub and Semidesert Grassland. Wildlife species that could frequent this area may include: Black-tailed jackrabbit (*Lepus californicus*), and three species of kangaroo rats (*Dipodomys* spp.). Western Kingbird (*Tyrannus verticalis*), Say's Phoebe (*Sayornis saya*), Loggerhead Shrikes (*Lanius ludovicianus*), Horned Lark (*Eremophila alpestris*), Meadow Lark (*Sturnella magna*), Scaled Quail (*Callipepla squamata*), Burrowing Owl (*Speotyto cunicularia*), Yellow Box Turtle (*Terrapene ornate luteola*), Desert-grassland Whiptail (*Cnemidophorus uniparens*). In addition, various mammals and reptiles such as mice, rabbits, skunks, and snakes may also transit through the project area.

The proposed construction would occur in areas that have been developed, or in areas where sparse vegetation exists. A biological survey was conducted by a Corps biologist on December 12, 2006. Wildlife displaced during construction would be minimal. Trenches will be checked daily for lizards. Any lizards found would be relocated out of the trench prior to stating work. No significant impacts should occur to wildlife as a result of the proposed project or the no-action alternative.

3.2.4 Special Status Species

Three agencies have primary responsibility for protecting and conserving plant and animal species within the proposed project area. The U. S. Fish and Wildlife Service (USFWS), under authority of the Endangered Species Act of 1973 (16 U.S.C. 1531), as amended, has the responsibility for Federal listed species. The New Mexico Department of Game and Fish (NMDGF) has the responsibility for state-listed wildlife species. The New Mexico Department of Minerals, Natural Resources, Forestry Division has the responsibility for state-listed endangered plant species. Each agency maintains a continually updated list of species that are classified, or are candidates for classification, as protected based on their present status and potential threats to future survival and recruitment into viable breeding populations. These types of status rankings represent an expression of threat level to a given species survival as a whole and/or within local or discrete populations. Special status species that potentially occur in Doña Ana County and may occur near the proposed project area are listed in Table 1.

Special status animal species listed by USFWS (USFWS 2008) and New Mexico Department of Game and Fish for Doña Ana County (NMDGF 2008) that might occur in or near the project area but are not anticipated to occur include the following:

The Aplomado Falcon (*Falco femoralis septentrionalis*) is a Federally endangered species with approved recovery and reintroduction plans (USFWS 2005). The aplomado falcon may fly over the construction area during spring and fall migrations. Falcons require open habitats that have scattered trees for hunting, roosting, and nesting and an understory of grass and shrubs. Habitat includes a variety of grassland, woodland, with open desert grassland and shrub habitats. Falcons are territorial during the breeding season using abandoned stick nests of

Table 1. Special Status Animal Species Listed for Doña Ana County, New Mexico, with the Potential to Occur in the Vicinity of the Proposed Project Area.

Common Name	Scientific Name	Federal Status (USFWS) a	State of New Mexico status (NMDGF) b
Rio Grande silvery minnow	*Hybognathus amarus*	E	E
Falcon, Aplomado	*Falco femoralis septentrionalis*	E	T
Flycatcher, Willow, SW.	*Empidonax traillii extimus*	E	E
Tern, Least	*Sterna antillarum athalassos*	E	E
Owl, Spotted, Mexican	*Strix occidentalis lucida*	T	
Ground-dove, Common	*Columbina passerina pallescens*	--	E
Nightjar, Buff-collared	*Caprimulgus ridgwayi ridgwayi*	--	E
Pelican, Brown	*Pelecanus occidentalis carolinensis*	--	E
Black-Hawk, Common	*Buteogallus anthracinus anthracinus*	SC	T
Falcon, Peregrine	*Falco peregrinus anatum*	SC	T
Falcon, Peregrine, Arctic	*Falco peregrinus tundrius*	SC	T
Sparrow, Baird's	*Ammodramus bairdii*	SC	T
Vireo, Bell's	*Vireo bellii arizonae*	SC	T
Vireo, Bell's	*Vireo bellii medius*	SC	T
Bunting, Varied	*Passerina versicolor versicolor*	--	T
Bunting, Varied	*Passerina versicolor dickeyae*	--	T
Cormorant, Neotropic	*Phalacrocorax brasilianus*	--	T
Eagle, Bald	*Haliaeetus leucocephalus alascanus*	--	T
Hummingbird, Broad-billed	*Cynanthus latirostris magicus*	--	T
Hummingbird, Costa's	*Calypte costae*	--	T
Hummingbird, Violet-crowned	*Amazilia violiceps ellioti*	--	T
Vireo, Gray	*Vireo vicinior*	--	T
Goshawk, Northern	*Accipiter gentilis atricapillus*	SC	--
Goshawk, Northern	*Accipiter gentilis apache*	SC	--
Owl, Burrowing	*Athene cunicularia hypugaea*	SC	--
Plover, Mountain	*Charadrius montanus*	SC	--
Tern, Black	*Chlidonias niger surinamensis*	SC	--
Cuckoo, Yellow-billed	*Coccyzus americanus occidentalis*	C	--
Sheep, Bighorn, Desert	*Ovis canadensis mexicana*	--	E
Bat, Spotted	*Euderma maculatum*	--	T
Chipmunk, Colorado, Organ Mtns.	*Neotamias quadrivittatus australis*	SC	T
Bat, Big-eared, Townsend's, Pale	*Corynorhinus townsendii pallescens*	SC	--
Bat, Red, Western	*Lasiurus blossevillii*	SC	--
Gopher, Pocket, Desert	*Geomys arenarius arenarius*	SC	--
Muskrat, Pecos River	*Ondatra zibethicus ripensis*	SC	--
Rat, Wood, White Sands	*Neotoma micropus leucophaea*	SC	--

Table 2. Special Status Plant Species Listed for Doña Ana County, New Mexico, with the Potential to Occur in the Vicinity of the Proposed Project Area.

Common Name	Scientific Name	Federal Status (USFWS) [a]	State of New Mexico status (NMDGF) [b]
Grayish-white giant hyssop	Agastache cana	--	--
Organ Mountains giant hyssop	Agastache pringlei var. verticillata	--	--
Castetter's milkvetch	Astragalus castetteri	--	--
Organ Mountains paintbrush	Castilleja organorum	--	--
Standley's whitlowgrass	Draba standleyi	--	--
Organ Mountains pincushion cactus	Escobaria organensis	--	--
Sandberg pincushion cactus	Escobaria sandbergii	--	--
Sneed's pincushion cactus	Escobaria sneedii var. sneedii	E	--
Villard pincushion cactus	Escobaria villardii	--	--
Arizona coralroot	Hexalectris spicata var. arizonica	--	--
Vasey's bitterweed	Hymenoxys vaseyi	--	--
Organ Mountains evening primrose	Oenothera organensis	--	--
Dune pricklypear cactus	Opuntia arenaria	--	--
Deer-horn cactus	Peniocereus greggii var. greggii	--	--
Alamo beardtongue	Penstemon alamosensis	--	--
Nodding cliff daisy	Perityle cernua	--	--
New Mexico rock daisy	Perityle staurophylla var. staurophylla	--	--
Mescalero milkwort	Polygala rimulicola var. mescalerorum	--	--
Supreme sage	Salvia summa	--	--
Smooth figwort	Scrophularia laevis	--	--
Plank's catchfly	Silene plankii	--	--

[a] **Endangered Species Act (ESA)** (as prepared by U.S. Fish and Wildlife Services) **status:** Only Endangered and Threatened species are protected by the ESA.

E Endangered: any species that is in danger of extinction throughout all or a significant portion of its range.

T Threatened: any species that is likely to become and endangered species within the foreseeable future throughout all or a significant portion of its range.

C Candidate: taxa for which the Services has on file sufficient information on biological vulnerability and threat(s) to support proposals to list them as endangered or threatened species.

SC Species of Concern: taxa for which information now in the possession of the Service indicates that proposing to list as endangered or threatened is possible appropriate, but for which sufficient data on biological vulnerability and threat are not currently available to support proposed rules.

P Proposed for listing in the identified category listed above

S/A Similarity of Appearance

[b] **State of New Mexico status:**

E Endangered Animal species whose prospects of survival or recruitment within the state are in jeopardy.

T Threatened Animal species whose prospects of survival or recruitment within the state are likely to become jeopardized in the foreseeable future.

SC Species of Special Concern.

S Sensitive

other bird species. Sporadic sightings of falcons have occurred in New Mexico since the 1970s, possibly juvenile birds that are dispersing from existing populations in the Mexican state of Chihuahua. The falcon is considered a nonessential 10(j) population in New Mexico resulting from experimental re-introduction (USFWS 2005). Due to the ease of mobility of the falcon, the limited disturbance of the proposed project, there would be no effect to the Aplomado Falcon.

The American Peregrine Falcon (*Falco peregrinus anatum*) is a Federally delisted species with an approved recovery plan, and a State threatened species. The peregrine falcon may fly over the construction area during spring and fall migrations. The peregrine prefers breeding habitat that is in isolated wooded areas with cliffs that create "gulfs" of air in which the peregrine may forage. The Peregrine's preferred wooded-forested habitat does not occur in or near the project area. Due to the ease of mobility of the peregrine, the limited disturbance of the proposed project and the lack of preferred habitat in the project area, there would be no effect to the American Peregrine Falcon.

Baird's Sparrow (*Ammodramus bairdii*), a State Threatened species, favors shrubby short-grass habitats. The sparrow is a migrant to New Mexico, occurring mainly in autumn primarily in the eastern plains and southern lowlands, but is considered rare to uncommon and a vagrant. The sparrow may fly over the construction area during migration; however, due to the ease of mobility, the limited disturbance of the proposed project and the lack of preferred habitat within the project area, there would be no effect to Baird's sparrow.

The Bald Eagle (*Haliaeetus leucocephalus*), protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act, is normally found near major waterways and larger lakes where adequate food supplies may be found. The Bald Eagle is known to occur in New Mexico primarily during the late fall and winter months. The Bald Eagle utilizes large trees for perching and forages primarily for fish, ducks, and carrion along rivers and at local reservoirs. No preferred habitat exists within or near the project area. Due to the lack of preferred habitat and the limited disturbance of the proposed project, there would be no effect to the Bald eagle.

In addition, the New Mexico Department of Minerals, Natural Resources, Forestry Division has the responsibility for maintaining the list of state-listed rare plant species. The State species list indicates that there are twenty one status plant species that occur in Doña Ana County (Table 2). They are each listed by the State of New Mexico Division of Forestry as a rare plant on the New Mexico Rare Plants Technical Council Website. Although these plants are known to occur in Doña Ana County, they are not likely to occur within the project area due to previous disturbance in the project area. None of the above rare plant's preferred habitat is located within the project area, and therefore there would be no effect to these rare plants.

3.3 Cultural Resources

An intensive pedestrian archaeological survey of the 43.2-acre Las Cruces West Mesa Industrial Park Wastewater Improvements project area was conducted by Corps archaeologists on December 12, 2006. No prehistoric sites were located during the survey. Two isolated occurrences, a broken mano and a chert flake, were recorded within the project area. One

archaeological site, a historic trash scatter, is located within 50 feet of the project area. The nearby archaeological site can be avoided, and the two isolated occurrences have been documented and are not considered significant. A copy of the negative survey report can be found in Appendix A (Lundquist 2007).

Consistent with the Department of Defense's American Indian and Alaska Native Policy, signed by Secretary of Defense William S. Cohen on October 28, 1998, and based on the State of New Mexico Indian Affairs Department's 2006 Native American Consultations List, American Indian Tribes that have indicated they have concerns in Dona Ana County include the Navajo Nation, Pueblo of Isleta, Comanche Indian Tribe, White Mountain Apache Tribal Council, Ysleta del Sur Pueblo, Fort Sill Apache Tribe, Kiowa Tribe of Oklahoma, and Mescalero Apache Tribe. Informal consultation (scoping) letters were mailed to these tribes on February 20, 2007. To date, the Corps has received no indication of tribal concerns that would impact this project. A copy of the Corps' letter and tribal responses is located in Appendix A.

Based on this information, the Corps is of the opinion that there would be "No Historic Properties Affected" by the proposed undertaking or on the historic and cultural resources of the region. The State Historic Preservation Officer concurred with the Corps' findings on August 10, 2007 (see Appendix A).

3.4 Human Health and Safety

The project under Section 595 provides environmental assistance to non-Federal interests in New Mexico in the form of design and construction assistance for wastewater treatment and related facilities. The proposed project would have a negligible short-term health and safety impact based on construction. Human health would benefit from the project by consolidation of the industrial park septic tank systems into the existing sewage treatment system. In the long-term, a minor benefit would occur to human health and safety due to the proposed project.

3.5 Land Use and Socioeconomic Considerations

The City of Las Cruces is located in Doña Ana County, New Mexico. The total population of Las Cruces in 2003 was 76,990 with Doña Ana County having an estimated 193,890 (U.S. Census Bureau 2008). The ethnic background for Doña Ana County is: white (non-Hispanic), 31.0%; Hispanic (any race), 65.0%; black (non-Hispanic), 2.6%; and other, 1.4%. In 2005, the per capita personal income in Doña Ana County was $23,070 compared to $29,673 for the entire state (U.S. Department of Commerce, Bureau of Economics 2008). The unemployment rate for Doña Ana County in 2007 was 3.4% (New Mexico Department of Labor 2008). Industries making major economic contributions to the county's economy include education services, health care, social assistance, and retail trade (New Mexico Department of Labor 2008). The proposed project would take place within an area that has been disturbed or is currently being developed. The proposed project would not affect land use or socioeconomic resources in the project area.

3.6 Environmental Justice

Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Low-Income Populations; February 11, 1994) was designed to focus the attention of federal agencies on the human health and environmental conditions of minority and low-income communities. It requires federal agencies to adopt strategies to address environmental justice concerns within the context of agency operations and proposed actions. In an accompanying memorandum, President Clinton emphasized that existing laws, such as the National Environmental Policy Act (NEPA), should provide an opportunity for federal agencies to assess the environmental hazards and socioeconomic impacts associated with any given agency action upon minority and low-income communities. In April of 1995, the USEPA released a guidance document entitled Environmental Justice Strategy: Executive Order 12898. In short, this document defines the approaches by which the USEPA will ensure that disproportionately high environmental and/or socioeconomic effects on minority and low-income communities are identified and addressed. Further, it establishes agency wide goals for all Native Americans with regard to Environmental Justice issues and concerns.

The Las Cruces West Mesa Industrial Park Wastewater System Improvement Project would be conducted under Section 595 of the Water Resources Development Act of 1999 (Public Law 106-53; 33 U.S.C. 2201 *et seq.*) as amended. This program is largely intended to provide needed assistance (design, construction, etc.) to communities in which water-related environmental infrastructure are in need of improvement. As such, this project would benefit several areas within a minority and low-income community. No adverse impacts on minority and/or low-income populations are expected. Under the definition of Executive Order 12898, there would be no adverse environmental justice impacts under the proposed action.

3.7 Cumulative Impacts

NEPA defines cumulative effects as "…the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonable foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions."

The footprint of the proposed project lies within a primarily developed area to improve the quality of the groundwater within the city of Las Cruces. The project will facilitate additional development within the Las Cruces West Mesa Industrial Park, and to a lesser extent the surrounding area. For these reasons, the proposed project when combined with past, present, and future activities in the City of Las Cruces would not significantly add to or raise local cumulative environmental impacts to a level of significance.

4.0 CONCLUSIONS AND SUMMARY

The proposed action evaluated in this EA addresses the effects of extending the sewer line to the north side of the Las Cruces West Mesa Industrial Park.

The analysis indicates that the proposed installation of the sewer line extension would serve a local need for improved groundwater quality. The proposed project would not result in any moderate or significant, short-term, long-term, or cumulative adverse effects. Therefore, construction of the proposed project would not significantly affect the quality of the human environment and is recommended for implementation.

5.0 PREPARATION, CONSULTATION AND COORDINATION

5.1 Preparation

This EA was prepared by the U.S. Army Corps of Engineers, Albuquerque District (USACE). Personnel primarily responsible for preparation include:

Michael D. Porter	Fishery Biologist, USACE, Albuquerque District
Lance A. Lundquist	Archaeologist, USACE, Albuquerque District
Pete K. Doles	Project Manager, USACE, Albuquerque District

5.2 Quality Control

This EA has been reviewed for quality control purposes. Personnel who reviewed this EA include:

Champe Green	Senior Biologist, USACE, Albuquerque District
John Schelberg	Senior Archaeologist, USACE, Albuquerque District
Ondrea Hummel	Chief, Environmental Resources Section, USACE, Albuquerque District

5.3 General Consultation and Coordination

Agencies and entities contacted formally or informally in preparation of this Environmental Assessment include:

US Fish and Wildlife Service
New Mexico Ecological Services Field Office
Albuquerque, New Mexico

US Environmental Protection Agency, Region 6
Office of Planning and Coordination
Dallas, Texas

NM Forestry and Resources Conservation Division
Energy, Minerals, and Natural Resources Department
Santa Fe, New Mexico

NM Department of Game and Fish
Conservations and Services Division
Albuquerque, New Mexico

NM Department of Transportation
Environmental Design and Permitting
Santa Fe, New Mexico

Utilities Director
City of Las Cruces, New Mexico

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